

BEARS

Through the Seasons



American Black Bear

MDC
DISCOVER
nature
SCHOOLS

Kindergarten
Student Guide



Name _____



Serving nature and you®

Missouri Department of Conservation, PO Box 180, Jefferson City, MO 65102-0180
mdc.mo.gov

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BEARS

Through the Seasons

Kindergarten Student Guide





Summer for a Bear



Sun: ©RoggerDesign/Shutterstock.com

Talk About It



Look at
the photos.

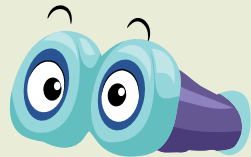
Name things you
might see and
do in summer.





Signs of Summer

What I
Notice...



What I
Wonder...



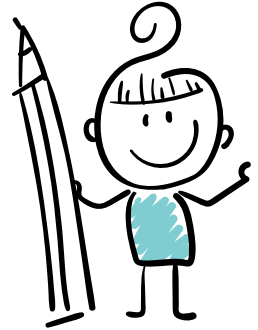
What do I do and see in summer?



Binoculars and Question Mark: ©BMP Design Studio/Shutterstock.com; Sun: ©RoggerDesign/Shutterstock.com

Draw It!

Draw things you might see in summer.





Read Together



When it is Summer

When it is summer,
it is summer for me.

It is summer in the house
and it is summer by a tree.

When it is summer,
it is summer for a bear.

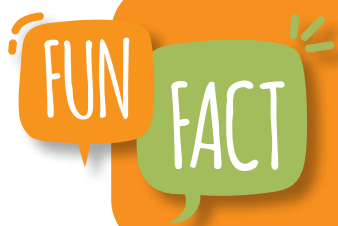
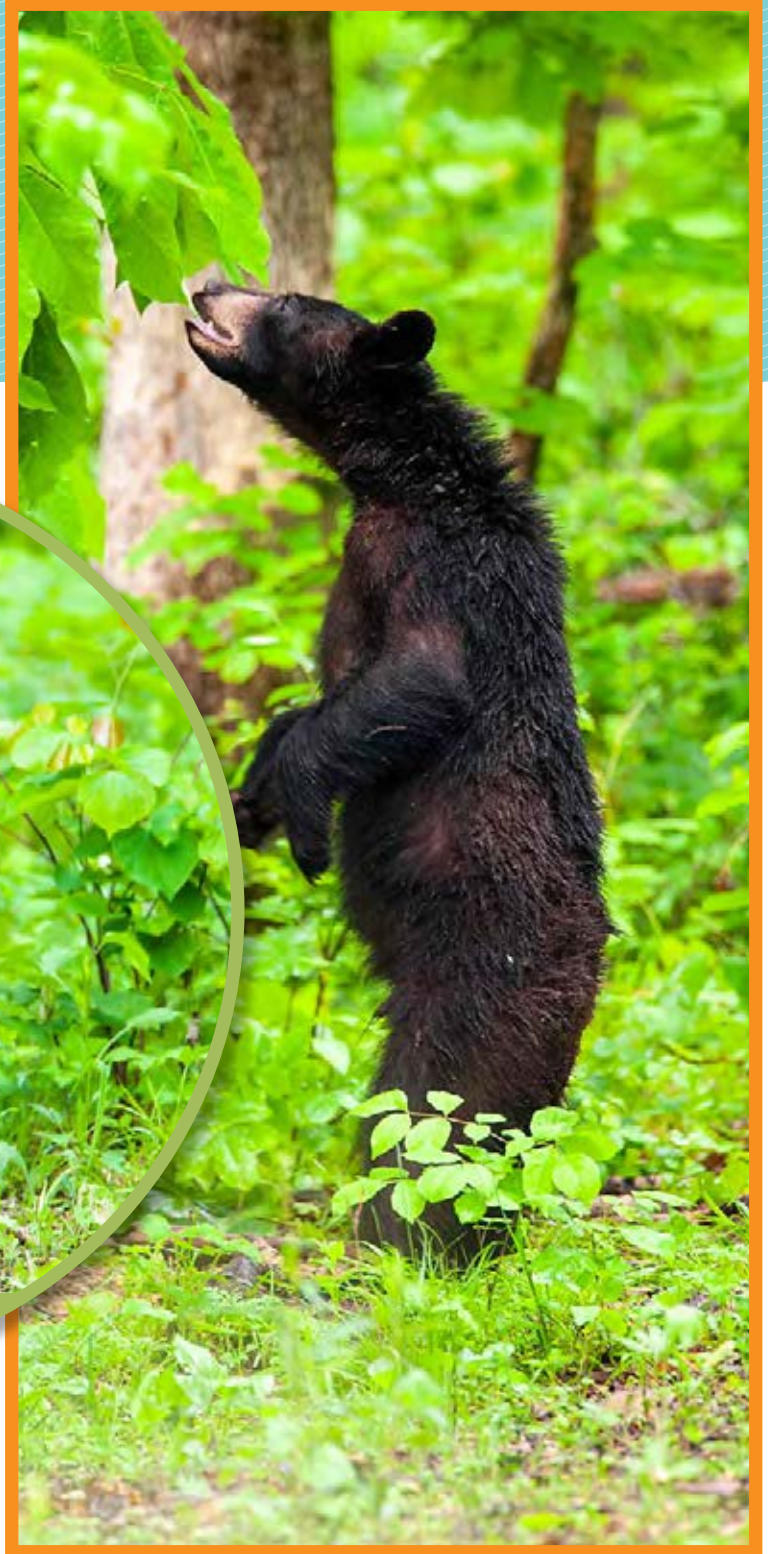
It is summer in the woods.
It is summer everywhere.



Sun: ©RoggerDesign/Shutterstock.com; Character Lineart: @Katelyna Fedorova Art/Shutterstock.com



American Black Bear



In the summer, black bears in Missouri love to eat ripe berries and fruits.

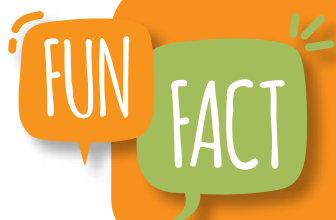
1A



Prickly Pear Cactus



Missouri Glade

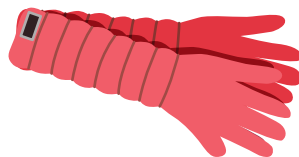
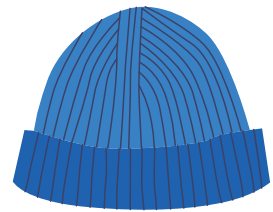


Missouri has glades which are areas that are like little hot and dry deserts. Glades have very little shade.

Science Notebook

Summer clothes

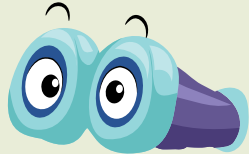
Circle items you would wear in summer.





What is Weather?

What I
Notice...



What I
Wonder...



How do we study weather?



Read Together



How can we study weather?

We can look at the sky.

What kinds of weather can you name?



1B



Cottontail Rabbit



Raccoon



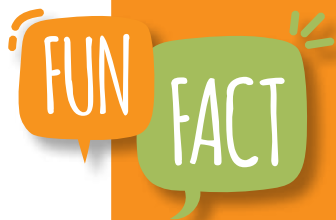
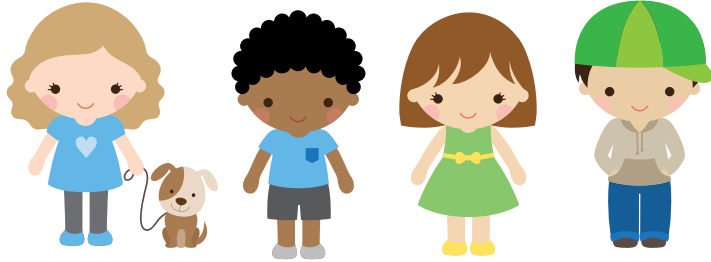
Coyote

Sun: ©RogerDesign/Shutterstock.com; Coyote and Pup: ©Betsy420/Dreamstime.com; Raccoon: ©Harry Collins/Dreamstime.com

Talk About It



*How do you dress
in different kinds
of weather?*



Missouri animals are always dressed just right. Many have hair or fur that changes for each season.



White-tailed Deer



Science Notebook

Match the clothing to the weather.
Draw a line from clothes to weather.



1.

A.



2.

B.



3.

C.



4.

D.



Today the sky is... (circle one)	degrees	
Today the sky is... (circle one)	degrees	
Today the sky is... (circle one)	degrees	
Today the sky is... (circle one)	degrees	
Today the sky is... (circle one)	degrees	
Today the sky is... (circle one)	degrees	

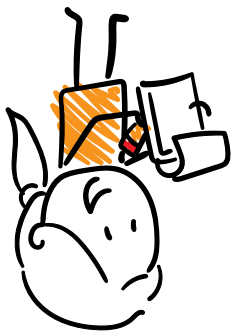
Today the sky is ...



Circle one of the following.

Today's temperature is _____ degrees.

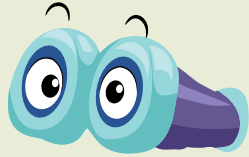
Recording Weather





Testing Our Cool

What I
Notice...



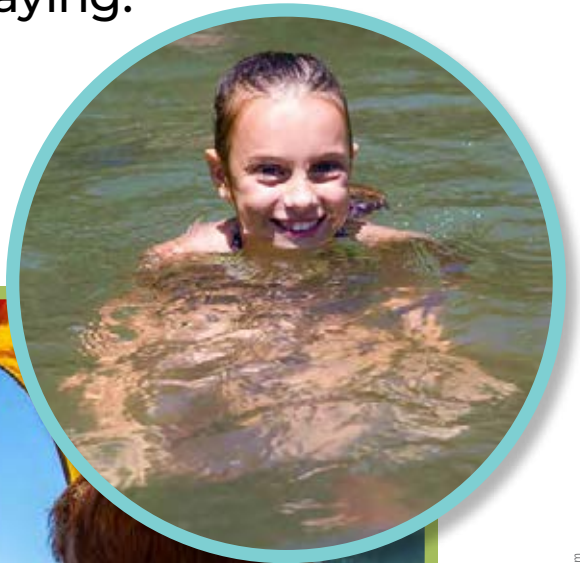
What I
Wonder...



It is a hot day and you are outside playing.

How might you cool off?

How do animals cool off?



Read Together



Sun and Shade

The sun gives off heat.

Heat makes us warm.

The shade hides the sun.

*Is it cooler or hotter
in the shade?*



Read Together



Animals Keep Cool

Animals look for shade when it is hot.

Some animals seek sunny spots.

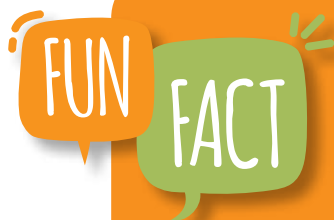
This helps them warm their bodies.



Raccoon



Fox Squirrel



Collared lizards can be found in Missouri glades.

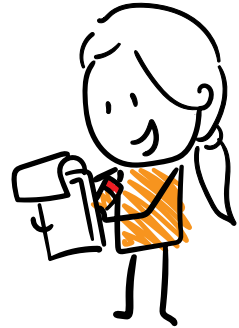
Glades are like mini deserts.



Science Notebook

Sun – Shade

Measure and record the temperature in sun and shade. Then fill in the blanks with the word “cool” or “warm.”



_____ degrees

In the shade, it felt _____.

Cool Warm



_____ degrees

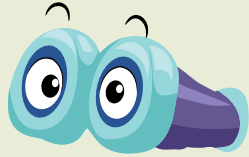
In the sun, it felt _____.

Cool Warm



Tracking Temperature

What I
Notice...



What I
Wonder...



It is a hot day and you are outside playing.

How might you cool off?

How do animals cool off?

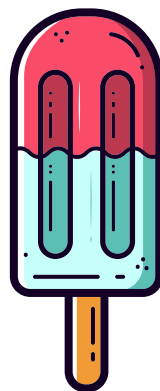


Northern Watersnake

Western Painted Turtles

Sun: ©RoggerDesign/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



What is Temperature?

Temperature is how cold or hot something is.

Temperature goes up as things get warmer.

Animals have a temperature and so do you.

The air also has a temperature.

What else has a temperature?



Science Notebook

Sun – Shade Review

Circle the best choice for each.



Temperature in **shade** is _____.

cooler warmer

Temperature in **sun** is _____.

cooler warmer

The _____ area was warmer.

sunny shady



Yellow Tulip Poplar Tree

Talk About It



Look at the picture.

*Why does this animal
want to sit on the rock
on a sunny day?*



Eastern Collared Lizard

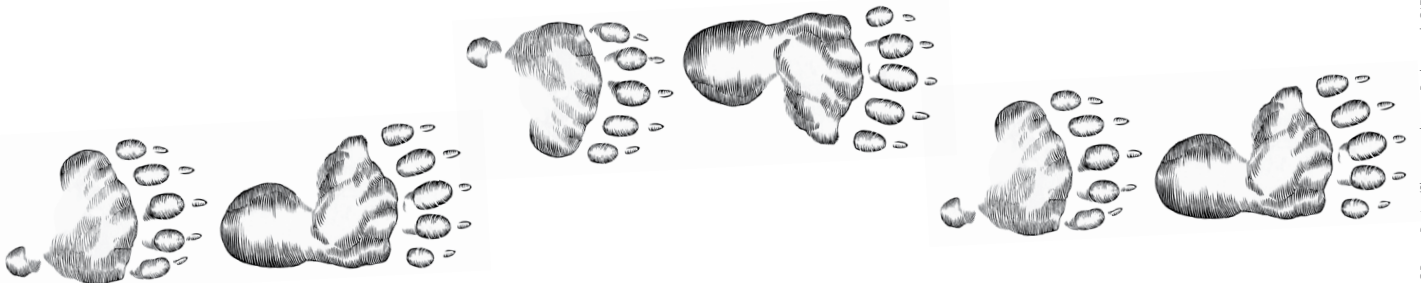


Science Notebook

Taking Temperature Data Sheet

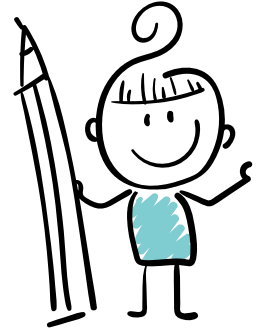


Outside Temperature			
Day	Morning	Noon	Afternoon
1			
2			
3			
4			
5			



Draw H!

Imagine it is a sunny summer day in the woods. Draw the best spot for you or a bear to get cool.

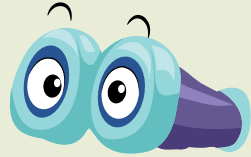


American Black Bear



Keep It Cool, Bear!

What I
Notice...



What I
Wonder...



It is a hot day and you are outside playing.

How might you cool off?

How do animals cool off?



American Black Bear



Eastern Collared Lizard



Cormorant

Read Together



Many animals like bears have thick hide or fur.

If the temperature gets warm, animals must find ways to cool down.



Flying Squirrel



Mink



Talk About It



White-tailed Deer

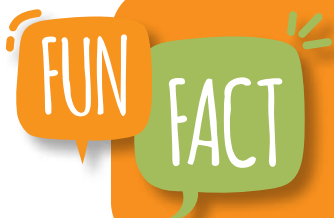
Think of ways
you cool down.

*How might an
animal cool down?*

*Are the ways
similar?*



Raccoon



Some animals have warm
blood and some have cold.
You have warm blood.



Blue Jay

Read Together



How Do I Compare to a Bear?

Sing to the tune of *Three Blind Mice*.

It is hot. It is hot.

Where can I go? Where can I go?

I can jump in a swimming pool,

When it is hot, to make me cool.

It is hot. It is hot.





Read Together



Grin and “Bear” It!

Sing to the tune of
Three Blind Mice

Bears get hot,
Just like me.

Where can they go?
Where can they go?

They can hide to get
cooled down,

Under shade trees and
on the ground.

Bears get hot.
Just like me.



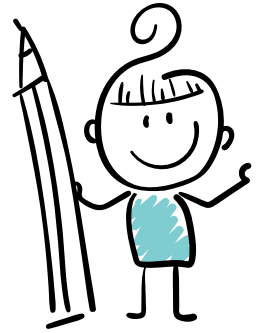
American Black Bear

Sun: ©RogerDesign/Shutterstock.com; Character Lineart: @Katelyna Fedorova Art/Shutterstock.com; Bear: ©Donyadonam/Dreamstime.com

Draw It!

Read along to the poems on the last two pages.

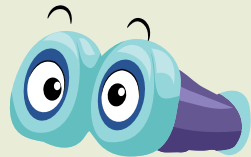
Draw how you and a bear get cool.





What Lives in My Schoolyard?

What I
Notice...



What I
Wonder...



What lives in my schoolyard?



Sun: ©RoggerDesign/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



Carpenter Bee



Northern Cardinal

Who Lives Here?

Who lives here?

Many critters do.

We might find many,

We might find few.

We might find bugs.

We might find snails.

We might find animals

With long furry tails.

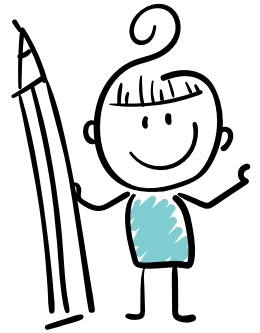


Snail



Draw It!

What kinds of animals do you think you will find outside?
Draw your guesses below.



My Area

Draw what you found in your area. Remember to draw your shape first and then draw what you see inside your shape.

What questions are you asking yourself as you explore your area?





Science Notebook

My Area

*How many plants did you see?
How many animals? Make a
tally mark (I) for each plant or
animal you saw.*

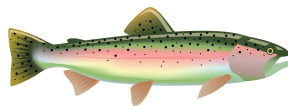
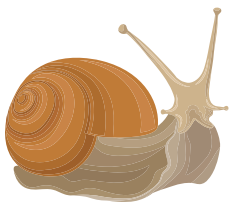
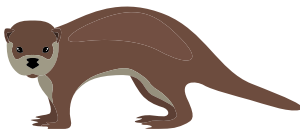
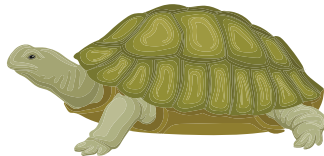


Example: Plants	
Plants 	
Animals 	

Did you see more plants or animals?

Who Belongs?

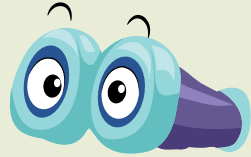
Circle the animals that might be found in your schoolyard.





Bear-y Good Habitat

What I
Notice...



What I
Wonder...



What do animals need to live?



American Black Bear

Sun: ©RoggerDesign/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



Habitats

Sing to the tune of *Are You Sleeping, Brother John?*

Habitats, habitats

Meet their needs

Meet their needs

Air and food and water

Space and shelter, too

Habitats, habitats

1G



American Robin

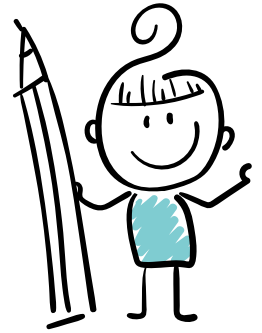


American Black Bear

Sun: ©RogerDesign/Shutterstock.com; Background: ©TDean/Shutterstock.com; Bear Eating: ©Rob Crandall/Alamy Stock Photo; Bear in Water: ©Lorraine Logan/Shutterstock.com

Draw It!

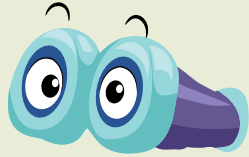
Think about what your animal needs to survive. Draw the needs of your team's animal and what its habitat would look like.





Pushy Bears

What I
Notice...



What I
Wonder...



How do bears get their food?



American Black Bear

Sun: ©RoggerDesign/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com; Bear Eating Berries: ©agefotostock/Alamy Stock Photo

Read Together



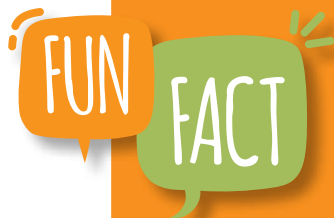
Bear-y Hungry

How do bears get their food?

Animals do not have grocery stores.

Bears must find their food.

What type of food do you think they might eat?



Black bears in Missouri eat a lot of things. They may eat grass, bugs, and berries. They also like a yummy snack like acorns and other nuts.





American Black Bear

Sun: ©RoggerDesign/Shutterstock.com; Background: ©UTDaan/Shutterstock.com; Bear Eating Top: ©Rob Crandall/Alamy Stock Photo; Bear Eating Bottom: ©Donald M. Jones/Minden Pictures

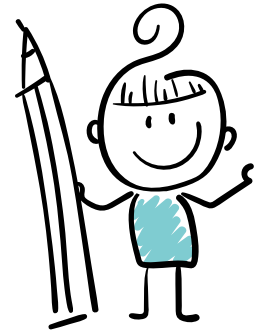
Science Notebook

Push and Pull

Draw a bear getting food by pushing on or pulling something.

Draw arrows **forward** to show a **push**.

Draw arrows **backward** to show a **pull**.





Bears in the Fall



American Black Bear

Leaf: 0310r4k/Shutterstock.com

Talk About It



Look at
the photos.

What season is this?

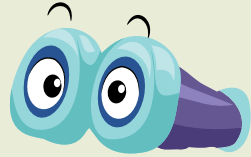
How do you know?





Bear Observations

What I
Notice...



What I
Wonder...



What do plants and animals do in the fall? Why?



Leaf: 031014k/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



American Black Bear

Winter is Coming

Sing to the tune of
Three Blind Mice.

Winter is coming

Winter is coming

It is getting cold

It is getting cold

Acorns will start falling

Bears will eat them up

It's getting cold

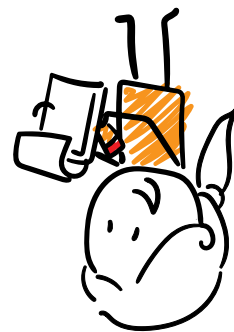
It's getting cold

FUN

FACT

To prepare for winter, black bears eat a lot! Acorns are a favorite. Many other animals also eat acorns. *Can you name a few of those animals?*





Recording Weather

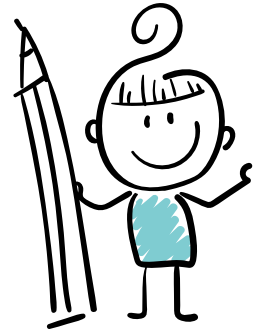
Today's temperature is _____ degrees.
 Circle one of the following.
 Today the sky is ...



Today the sky is... (circle one)	degrees	
degrees		
degrees		
degrees		
degrees		
degrees		

Draw It!

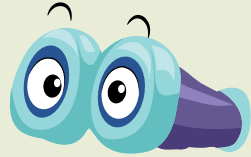
You have learned that bears prepare for winter by eating more. *When the temperature starts to drop, what other animals in Missouri also prepare for the winter? In what way does that animal prepare for winter? Draw It!*





Losing Daylight

What I
Notice...



What I
Wonder...



Why do trees look different in the fall?



Leaf: 0310144/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



Pictures of Trees

Look at the pictures of trees.

How are these pictures different?





Talk About It



American Bittersweet

Trees look different
in different seasons.

Many trees lose
their leaves.

*What time of year
does this happen?*



Leaf: 0310r4k/Shutterstock.com

Read Together



Losing Leaves

In the fall, trees look different than in summer.

Why do you think this happens?

Do you dress differently in fall than you do in summer?



FUN

FACT

Some trees in Missouri do not lose their leaves in fall and winter. Trees like cedars and pines that do not lose their leaves are called evergreen trees.

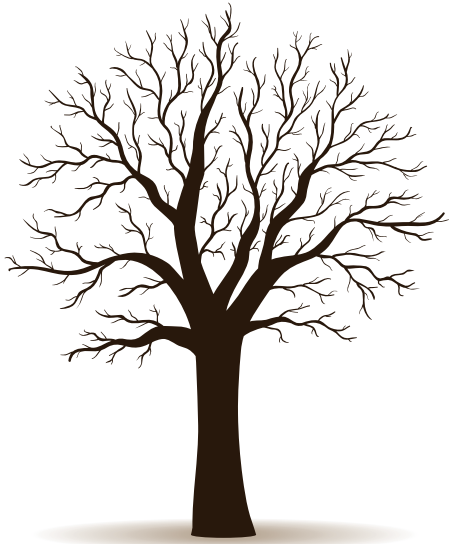




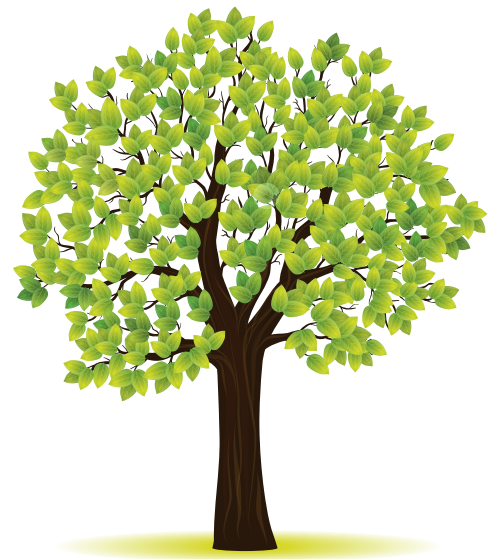
Science Notebook

Match the Season

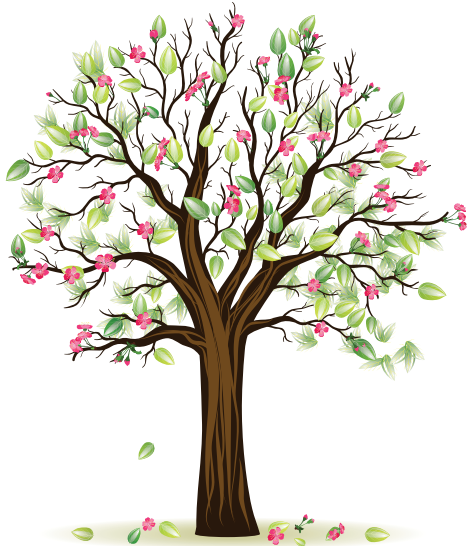
Draw a line to match the tree to the time of year it can be found.



Spring



Summer



Fall








Winter

My Growing Seedlings

Draw a picture of each of your seedlings each week under the correct column:

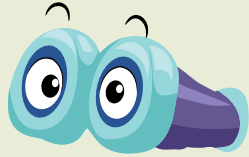


Week	 		 
1			
2			
3			
4			
5			
6			



Wow! Bears Eat a Lot!

What I
Notice...



What I
Wonder...



What do black bears do to get ready for the winter?



Acorns

Leaf: 0310144/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



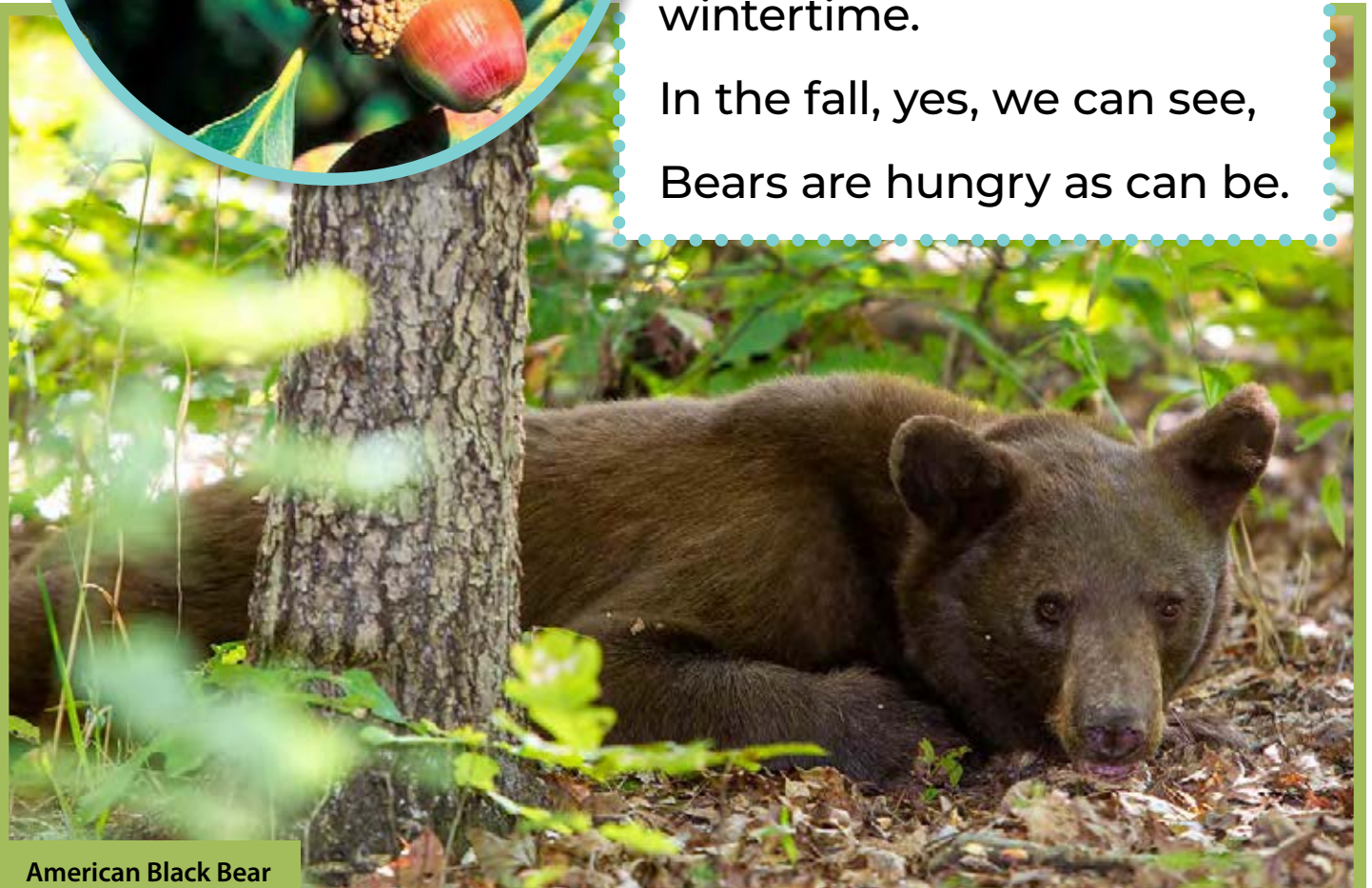
Hungry as Can Be

Sing to the tune of the *ABC* song.

In the fall, yes, we can see,
bears are hungry as can be.

They eat and eat all the
time, sleeping through the
wintertime.

In the fall, yes, we can see,
Bears are hungry as can be.

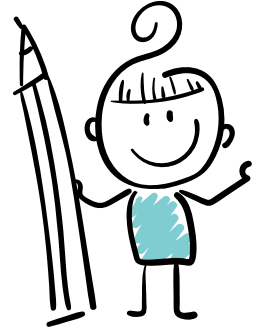


American Black Bear



Draw It!

Storing Up



Draw what a bear does in the fall. *How big is your bear?*

Draw what a bear does in the winter. *How big is your bear?*

Are the bear sizes different? Why?

Science Notebook

What Happens Next?

Put the items below in order and draw what you think comes first, next, and then last. *Why?* Explain to your classmates or teachers



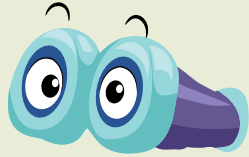
First	Next	Last

Diagram showing a sequence of three empty boxes for drawing, connected by arrows indicating a flow from left to right.



Bear Needs a Nap

What I
Notice...



What I
Wonder...



What do bears do to get ready for the winter?



American Black Bear

Leaf: 0310144/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



Are All Black Bears Black?

Missouri black bears often have black fur.

Sometimes black bears are not black.

Look at the photos.

Can you spot which one is blonde?

Can you spot which one is brown?



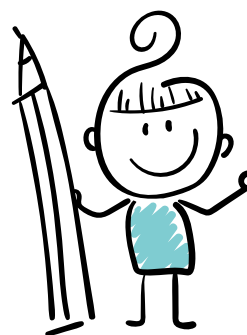


Science Notebook

Map Your Nap

Draw a map of the spot you chose for your bear nap and write the temperature of your spot.

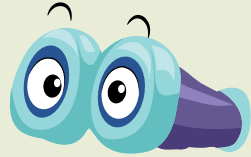






Finding a Den

What I
Notice...



What I
Wonder...



How do bears use their den to survive?



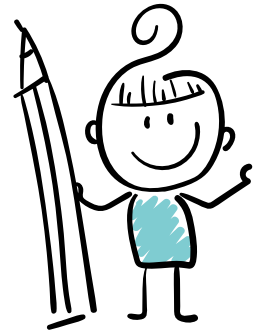
American Black Bear

Leaf: 031014k/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Draw It!

This Den for the Win!

Draw the best den that was created.
Why is this the best den?





Read Together



Bears Use Dens

Sing to the tune of *Are You Sleeping, Brother John?*

Bears use dens,
bears use dens

To survive,
to survive

Some have sticks and logs

Some find hollow trees

Bears use dens,
bears use dens



American Black Bear

Leaf: 0310r4k/Shutterstock.com; Character Lineart: @Kateryna Fedorova Art/Shutterstock.com

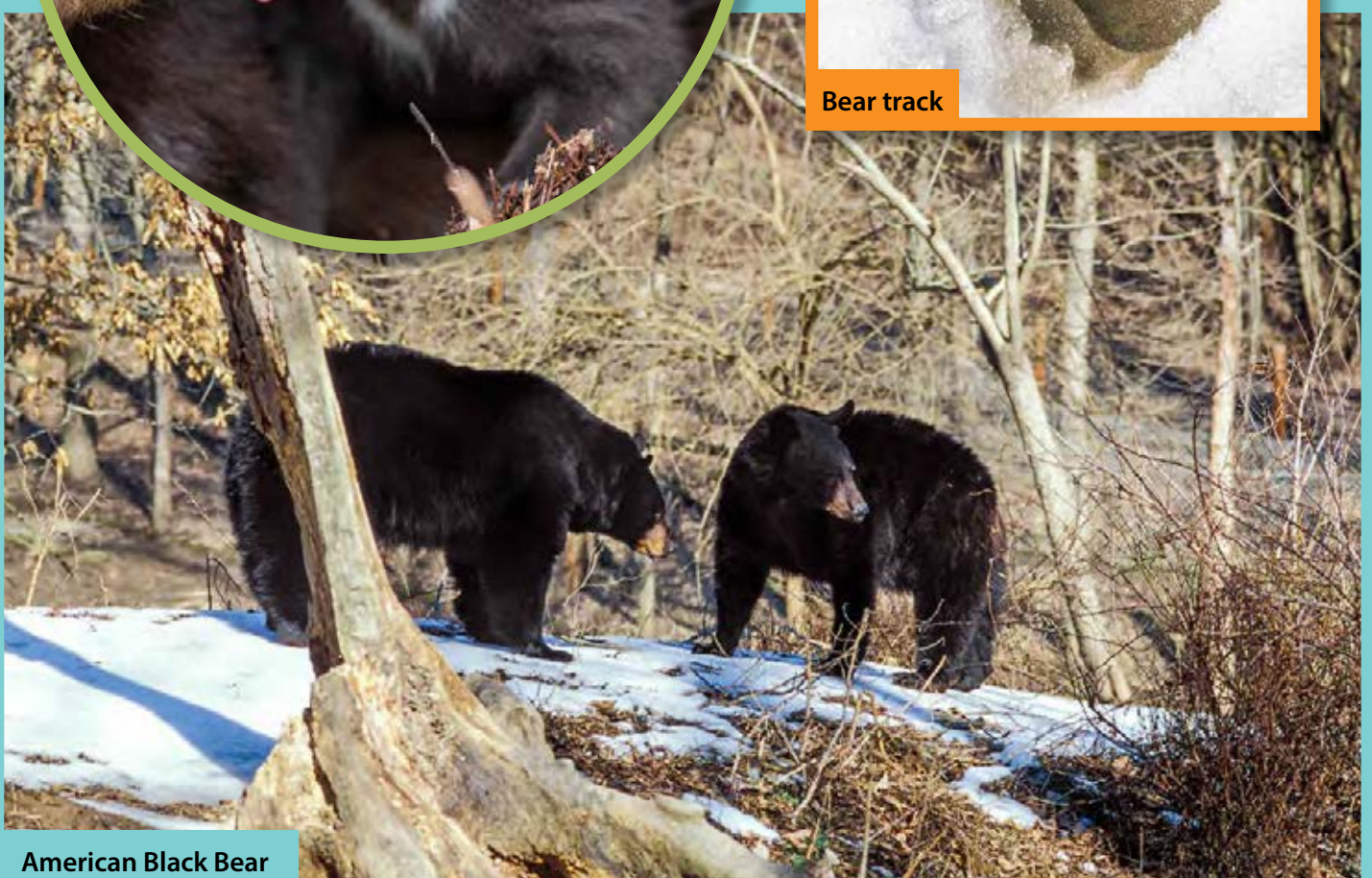




Bears in the Winter



Bear track



American Black Bear

Snowflake: 0310r4k/Shutterstock.com

Talk About It



Look at
the photos.

What season is this?

How do you know?

*Will this season be
different for bears?*

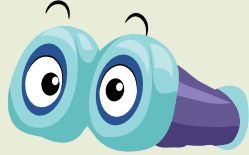
How?





Surviving the Cold

What I
Notice...



What I
Wonder...



How do animals survive in the winter?



American Black Bear

Snowflake: 031044/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Talk About It



*How do animals
change their behavior
in the winter to survive?*

*Do you do different
things in winter than
in summer?*

Why?





Read Together



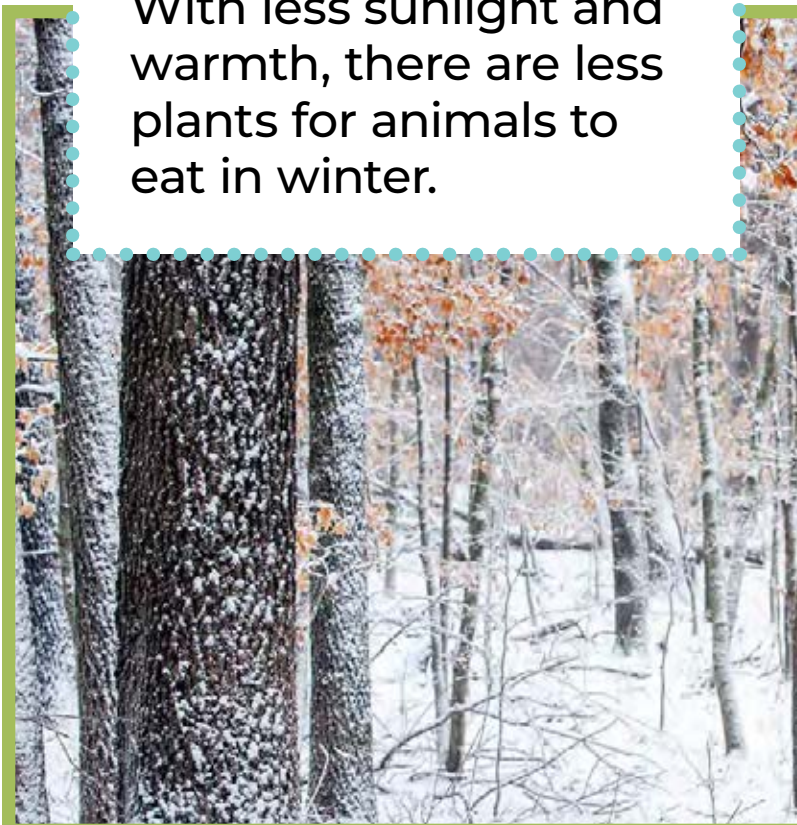
Surviving the Cold

In winter, it is cold.

In winter, there is less sunlight.

Many animals need plants to eat to live.

With less sunlight and warmth, there are less plants for animals to eat in winter.

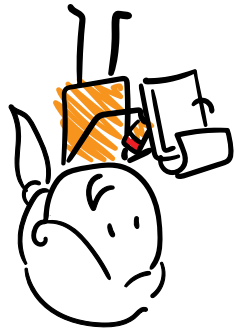


Science Notebook

Recording Weather

Today's temperature is _____ degrees.
 Circle one of the following.

Today the sky is ...



Today the sky is... (circle one)	degrees	
	degrees	
	degrees	
	degrees	
	degrees	
	degrees	



Science Notebook

How Many Breaths?

Do each activity for one minute. Count your breath after each activity for 20 seconds. *As a class, what was our most common number of breaths?* Record the class number.



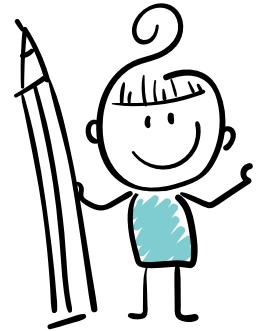
Number of Breaths	30			
	28			
	26			
	24			
	22			
	20			
	18			
	16			
	14			
	12			
	10			
	8			
	6			
	4			
	2			
		Sitting	Walking	Running
		Activity		

When do you think you were using the most energy?
While I was... **Circle** one: sitting walking running

Draw It!

Winter Activities

Draw a picture of what a bear does in the winter. Draw a picture of what you do in the winter. *How are the activities the same or different?*

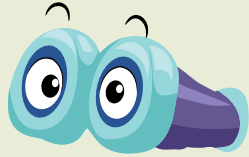


Bear in Winter	Me in Winter



New Cubs!

What I
Notice...



What I
Wonder...

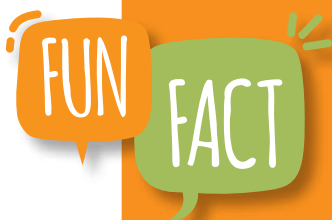


How does mama bear keep her cubs safe?

How do our own mothers keep us safe?



American Black Bear



When baby bears are born, they only weigh about 8 ounces. That is less than a pound and about the size of an orange.



Read Together



Mama Bear

Sing to the tune of the *ABC song*.

Mama bear, mama bear
Where are you?

Baby bear, baby bear
Here with you.

You can hear me by my
sound.

Letting you know that
I'm around.

Baby bear, baby bear
listen for me

That will keep you safe,
you see.

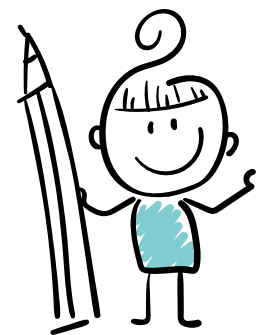




Draw It!

Listen Up!

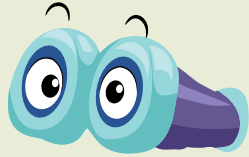
Draw a scene of an adult
using words to keep you safe.





Surviving a Storm

What I
Notice...



What I
Wonder...



How do our homes keep us safe during bad weather?



Snowflake: 03104k/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Read Together



Be Prepared

The wind blows fast

We look and see,

The sky turns dark

For bears and me.

The air is cold

Safe home we run.

Bears are safe,

In their den when the storm is done.

What kind of weather is in this photo?

How can we tell that unsafe weather is coming?





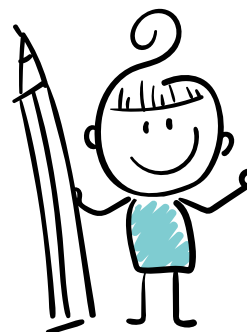
Science Notebook

A Safe and Snug Shelter

Thinking about what we learned in our experiment, draw a shelter that will keep a family safe and dry from severe weather.

Why do you think this is the best shelter?

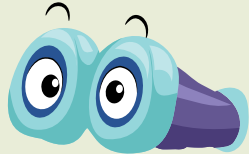






Wake Up, Hungry Bears!

What I
Notice...



What I
Wonder...



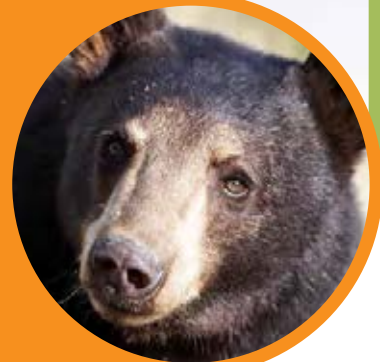
How do bears find food when they wake up?



FUN

FACT

Did you know that a bear's strongest sense is its nose? A bear has a better smeller than almost any other animal. Scientists believe that a bear can smell food from several miles away.



Read Together



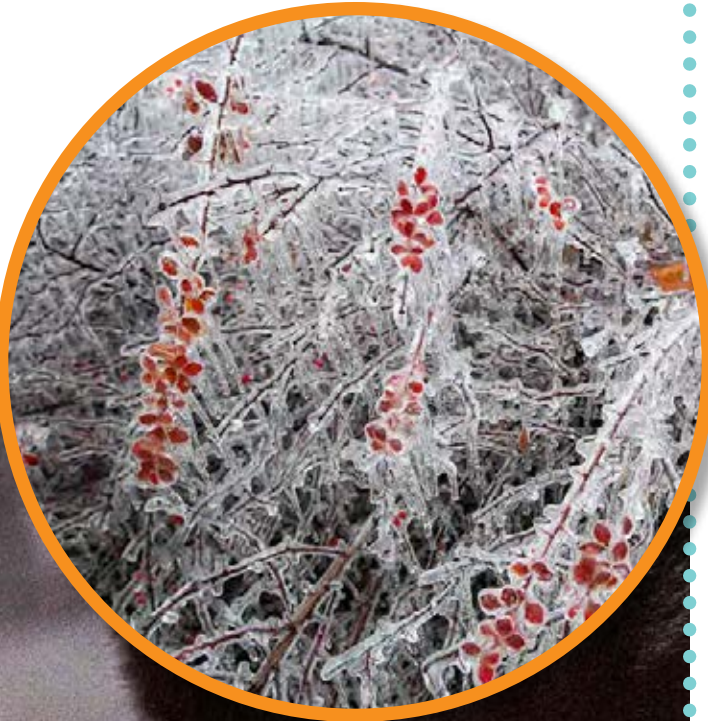
A Nose for Food

When bears wake up, they are hungry.

Are you hungry when you wake up?

Many of a bear's favorite foods are not available in winter.

They must use their nose to smell food nearby.



American Black Bear

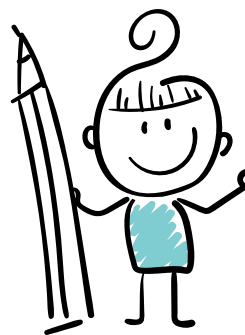


Science Notebook

Sniff it Out

Imagine you are a bear that just woke up. Draw yourself as a bear finding food. Include the food you find and how you found it.







Bears in the Spring!



American Black Bear

Dogwood: ©NaturallyCurvy/Shutterstock.com; Bear and Cub: ©RichardSeeley/istock.com

Talk About It



Look at
the photos.

What season is this?

How do you know?

*Will this season be
different for bears?*

How?

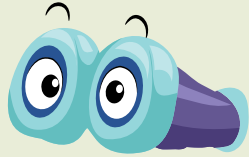


Spring Beauty



Hello Spring!

What I
Notice...



What I
Wonder...



What do people and animals do in the spring?



American Black Bear

Compass Plant

Read Together



Everything is Waking Up!

Spring is a time for new growth.

Bear cubs are growing.

So is the rest of nature.

Trees start to bloom,
and new plants come
up from the ground.





Science Notebook

Recording Weather

Today's temperature is _____ degrees.

Circle one of the following.



Today the sky is ...

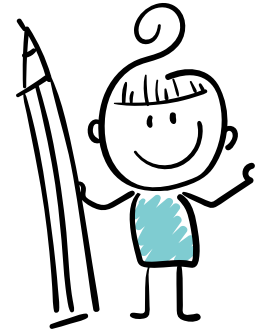


Today is...	Today the temperature is...	Today the sky is... (circle one)
	degrees	
	degrees	
	degrees	
	degrees	
	degrees	

Draw It!

Me in the Spring

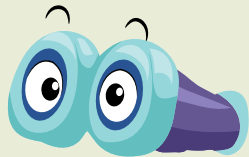
Draw a picture of something you like to do in the spring.





Sprouting Seedlings

What I
Notice...



What I
Wonder...



What do plants need to grow?



Spring Beauty



Compass Plant



Bald Cypress Seedling

Read Together



We All Have Needs

Bears have needs in order to grow.

Do you remember what they are?

Plants and trees have many of the same needs.



Spicebush



Science Notebook

Seedling Growth and Water

How tall is your plant?

With your group, measure and record the growth of your seed once a week over six weeks.

What measurement tool are you using?
Keep using the same measurement tool each week.

Date	No Water	1 Teaspoon of Water	1/4 Cup of Water

Dogwood: ©NaturallyCurvy/Shutterstock.com; Background: ©iDean/Shutterstock.com

Seedling Growth and Light

How tall is your plant?

With your group, measure and record the growth of your seed once a week over six weeks.



What measurement tool are you using?

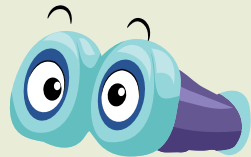
Keep using the same measurement tool each week.

Date	No Sunlight	Small Amount of Sunlight	Direct Sunlight



Tree Takeover

What I
Notice...



What I
Wonder...



Why do plants grow in different places?



Sidewalk: Courtesy of Steve Dukes; Fence: Courtesy of Kay Bode; Dogwood: ©NaturallyCurvy/Shutterstock.com; Binoculars and Question Mark: ©BMP Design Studio/Shutterstock.com

Read Together

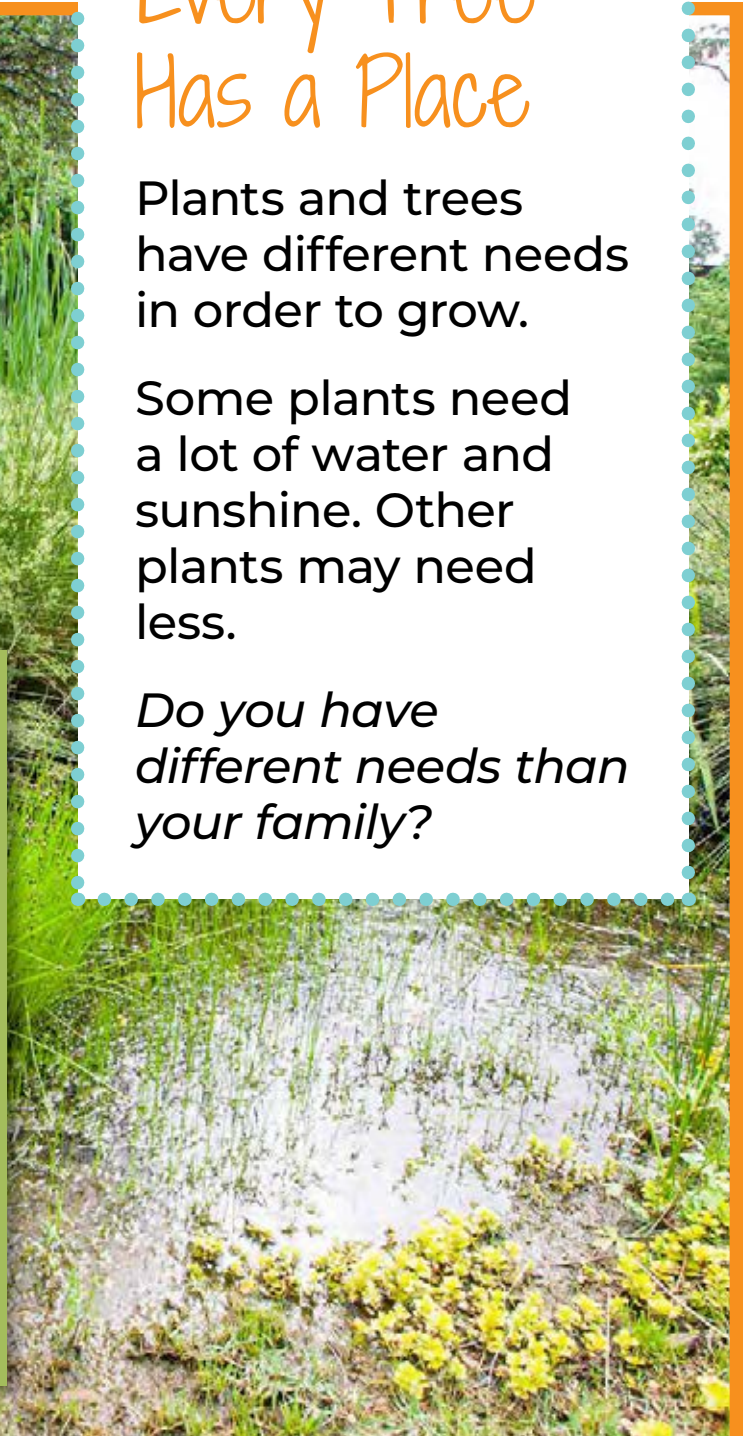


Every Tree Has a Place

Plants and trees have different needs in order to grow.

Some plants need a lot of water and sunshine. Other plants may need less.

Do you have different needs than your family?



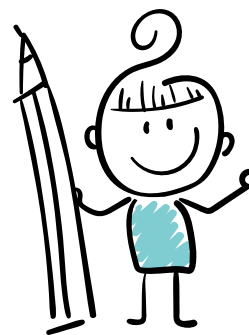


Science Notebook

Changes

Draw how the growing plant or tree changes its surroundings.

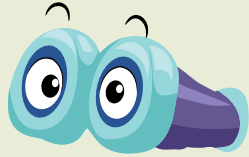






Sunshine Days

What I
Notice...



What I
Wonder...



When do we have the most sun during the year?



Dogwood: ©NaturallyCurvy/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com

Talk About It



Look at the photo.

*Is this a photo of
summer or winter?*

Is it daylight or dark?

*Is it darker at the same
time of day in winter?*





Science Notebook

What Does Our Graph Say?

What season has the **most** daylight hours? _____

What season has the **least** daylight hours? _____



15				
14				
13				
12				
11				
10				
9				
8				
7				
6				
5				
4				
3				
2				
1				
	Summer	Fall	Winter	Spring

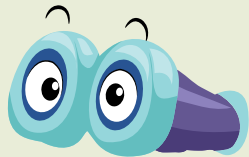
Dogwood: ©NaturallyCurry/Shutterstock.com; Background: ©JDean/Shutterstock.com; Character Lineart: ©Kateryna Fedorova Art/Shutterstock.com





Hungry, Again!

What I
Notice...



What I
Wonder...



How can we be more bear aware?



American Black Bear

Dogwood: ©NaturallyCurvy/Shutterstock.com; Binoculars and Question Mark: ©BNP Design Studio/Shutterstock.com; Bear and Dumpster: ©Tom Middleton/Shutterstock.com

Read Together



Bear Aware Song

Sing to the tune of the
Three Blind Mice.

Be bear aware

Be bear aware

Yes, we should care

How they fare

Don't leave the garbage
lying all around

In places near where a
bear might be found

Be bear aware

Be bear aware



Character Lineart: ©Katerina Fedorova Art/Shutterstock.com; Bear and Cub: ©Christina Dutkowski/Shutterstock.com



Talk About It



Bear track

*Do bears ever
come out of
the woods?*

Why might bears do this?

*Could this be unsafe for
bears and for people?*

How?

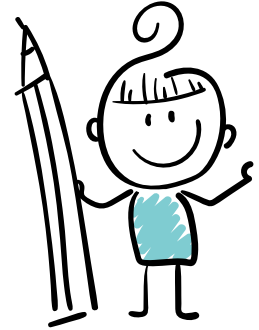


American Black Bear

Draw It!

Be Bear Aware

Draw how you could make sure you are being bear aware.

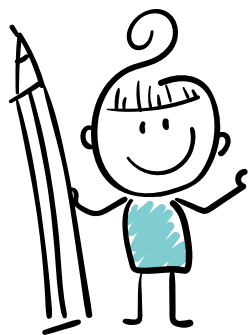




Draw It!

A Bear-y Happy Ending

Happy Graduation! Let's review what you learned this year. Flip back through your student guide and draw your favorite bear lesson or activity.



Bear Aware Pledge



I _____ solemnly
promise that I will be more bear aware.

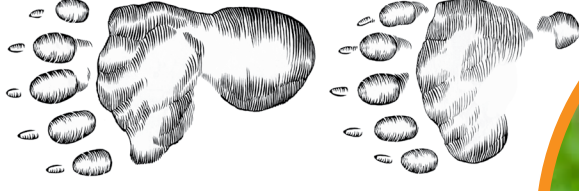
I will talk with my friends, family, and
neighbors about what can attract a bear or
other Missouri wildlife to our neighborhood
so we can keep our bears wild.

I will watch for food sources in our
neighborhood that can attract bears or
other Missouri critters and take those food
sources away.

I will work hard to keep bears and other
Missouri wildlife wild.

Congratulations!

You have completed a one-year study on Missouri Black Bears and
will now graduate from a bear cub to a bear yearling!

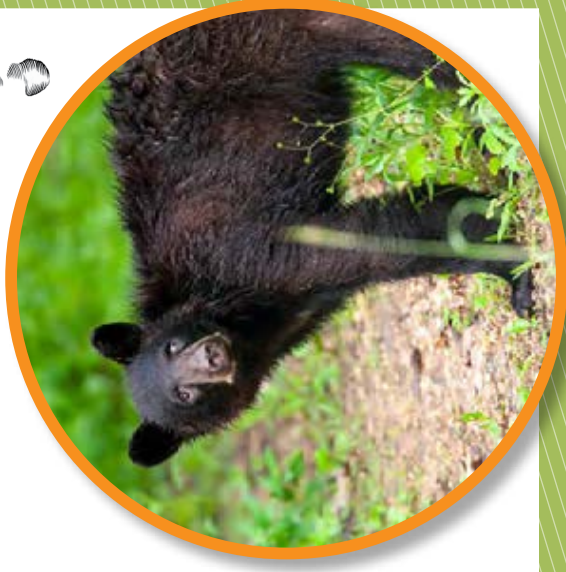


This certificate is presented to:

Date:

Kindergarten Teacher:

School Name:





mdc.mo.gov